

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-19 are now present in the application. Claims 5, 6, 8, 15, 16 and 18 have been amended. Claims 1 and 10 are independent. Reconsideration of this application, as amended, is respectfully requested.

Allowable Subject Matter

The Examiner has indicated that dependent claims 2, 3, 12 and 13 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. The Examiner also indicated that dependent claims 5 and 15 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. Applicants greatly appreciate the indication of allowable subject matter by the Examiner.

Claim Rejections Under 35 U.S.C. §112

Claims 5, 6, 8, 15, 16 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. These rejections are respectfully traversed.

As the Examiner will note, claims 5, 6, 8, 15, 16 and 18 have been amended to address the Examiner's requested changes.

Accordingly, all of the claims are definite and clear. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, second paragraph, are therefore respectfully requested.

Claim Rejections Under 35 U.S.C. §§ 102 & 103

Claims 1, 4 and 7-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Seong, U.S. Patent No. 5,606,296. Claims 6, 10, 11, 14 and 16-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Seong in view of Hoffman, U.S. Patent No. 5,457,435. These rejections are respectfully traversed.

As the Examiner will note, independent claim 1 recites a combination of elements including "a duty cycle converting circuit for receiving a first PWM signal and then generating a duty cycle reference voltage based on a first duty cycle of the first PWM signal"; independent claim 10 recites a combination of elements including "a PWM buffer circuit, coupled to the PWM signal generation unit, for converting the first PWM signal into a second PWM signal having a fixed frequency and a second duty cycle". Applicants respectfully submit that the above combinations of elements as set forth in independent claims 1 and 10 are not disclosed nor suggested by the references relied on by the Examiner.

Seong discloses a pulse width modulation (PWM) control circuit including an error amplifier 301 for receiving an output voltage V_o and a reference voltage $V_{o_{ref}}$ (see FIG. 3; col. 2, lines 56-59). However, Seong fails to teach the output voltage

Vo received by the error amplifier 301 (referred to by the Examiner as the duty cycle converting circuit in claim 1 and the PWM buffer circuit in claim 10) is a PWM signal. In fact, Seong only teaches modulating pulse width of the sawtooth voltage V_{TR} (see col. 3, lines 21-32), which is not a PWM, either. Accordingly, Seong fails to teach the above combinations of elements as recited in independent claims 1 and 10.

With regard to the Examiner's reliance on Hoffman, this reference has only been relied on for its teachings of the operational amplifier. This reference also fails to disclose the above combinations of elements as set forth in independent claims 1 and 10. Accordingly, this reference fails to cure the deficiencies of Seong.

Accordingly, none of the references utilized by the Examiner individually or in combination teach or suggest the limitations of independent claims 1 and 10 or their dependent claims. Therefore, Applicants respectfully submit that all of the claims clearly define over the teachings of the references relied on by the Examiner.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the

state of the art, no further comments are necessary with respect thereto.

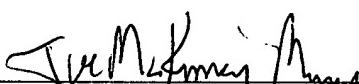
It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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